

**Minutes**  
**Rigging Working Group**  
Friday, 25 Jan 2019  
Wyndham Garden Anaheim  
Anaheim, CA

**Chairpersons:**

Bill Sapsis, Sapsis Rigging, Inc.; P; U (presiding)  
Christine Kaiser, Syracuse Scenery & Stage Lighting Co., Inc.; P; DR

**Recording secretaries:** Richard Nix, Karl G. Ruling; ESTA

**Members attending:**

Jacob Abbott; PSAV Presentation Services; O; U  
Jesse Adams; Rose Brand; P; DR  
Dana Bartholomew; Silver State Wire Rope and Rigging; P; DR  
Peter W. Batt; Mainstage Theatrical Supply, Inc; P; DR  
William Beautyman; Limelight Productions, Inc.; P; DR  
Ian Bevan; Walt Disney Parks & Resorts; P; U  
William Bradburn; Aerial Arts, Inc.; P; U  
Bennett Brian; Reed Rigging Inc.; P; DR  
Jay Cid; R&M Materials Handling / Stagemaker; A; MP  
Bruce Darden; InterAmerica Stage, Inc.; P; CP  
David Darland; PSAV Presentation Services; O; U  
Jack Gallagher; R&M Materials Handling / Stagemaker; A; MP  
Mike Garl; Mike Garl Consulting LLC; P; DE  
Ethan W Gilson; Entertainment Rigging Services, LLC; P; U  
William B. Gorlin; M.G. McLaren, P.C.; P; G  
Jerry Gorrell; Theatre Safety Programs; P; G  
Rod Haney; I.A.T.S.E. Local 891; P; U  
Tim Hansen; Oasis Stage Werks; P; DR  
Robert Haycock; UC Berkeley; I; U  
Jeremy Hodgson; Cirque Du Soleil, Inc.; P; U  
Nick Holmberg; PSAV; O; DR  
Joseph Jeremy; Show Distribution Group, Inc.; P; CP  
Ted Jones; Grand Stage; P; U  
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR  
Theresa Kelley; Xtreme Structures and Fabrication; A; MP  
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U  
Kalen Larson; ZFX, Inc.; P; CP  
Jon Lenard; Applied Electronics; A; MP  
Ross Long; I.A.T.S.E. Local 891; A; G  
Jacob E. Loretto; Musson Theatrical Inc.; P; DR  
Daniel H. Louis; Theta Consulting LLC; P; G  
Bill McIntyre; Show Distribution Group, Inc.; A; CP  
Mike Merz; Steven Schaefer Associates, Inc; A; DE  
Sam Michael; Thern, Inc.; P; MP  
Chris Moulton; Contract Services Administration Trust Fund; P; U  
Bartholomew J. Mueller; Recreation Engineering Inc.; P; DE  
Jim Niesel; Theatre Projects Consultants, Inc.; P; DE  
Richard J. Nix; Richard J. Nix; I; G  
Tracy Nunnally; Vertigo; P; CP  
John Ringelman; Freeman Companies; P; DR  
Tim Salamon; PSAV Presentation Services; O; DR  
Bill Sapsis; Sapsis Rigging, Inc.; P; U  
Chris Schmidt; Freeman Companies; A; DR  
Steven Serafin; Chubb Group of Insurance Companies; P; G

Peter V. Svitavsky; Wenger Corp.; P; CP  
Ken Tilson; Columbus McKinnon Corp.; P; MP  
Will Todd; Area Four Industries; P; MP  
Elmer Veith; Reliable Design Services; P; CP  
Steve Walker; Steve A. Walker & Associates; P; G  
Patrick Wallace; PSAV Presentation Services; O; U  
Mike Webb; Motion Laboratories, Inc.; A; MP  
Charlie Weiner; Eurotruss; P; MP  
Michael Wells; Xtreme Structures and Fabrication; P; MP  
Drew Wending; PSAV Presentation Services; O; DR  
Marty Westrom; Mountain Productions Inc.; P; DR  
Mike Weston; PSAV Presentation Services; O; DR  
Greg Williams; PSAV Presentation Services; O; G  
R. Duane Wilson; Amer. Society of Theatre Consultants; P; DE  
Max A. Wilson; Applied Electronics; P; MP  
Allen Winzler; Clark-Reder Engineering, Inc.; P; DE  
Andrew Young; Andrew Young; I; U

#### **Visitors:**

Mike Brubaker; Associated Controls & Design  
Matt Panther; Reliable Design Services  
Rocky Paulson  
Stephen Surratt; Texas Scenic

### **1 Opening Remarks**

Bill Sapsis called the meeting to order at 19:03. He welcomed people to Anaheim and the Wyndham Garden Anaheim. He thanked everyone for attending.

He then jumped to the self-introductions of those in the room, and of those attending on-line.

### **2 Patent and anti-trust statements**

#### **2.1 Reading of the anti-trust statement**

The following statement was read aloud to the assembly by Bill Sapsis:

*ESTA and its members take seriously their obligation to comply with all applicable antitrust laws. Therefore, during this meeting and during all ESTA events, all discussions will be limited to those subjects that are permitted by the antitrust laws. All members should refrain from any discussion or mention of competitively sensitive subjects such as the current or future prices charged for any member product or services, current or future marketing plans or strategies, and current or future costs, including employee salaries. There also must be no agreement on the suppliers or customers that members will or will not do business with or the markets in which members will conduct business.*

*Violations of the antitrust laws can have serious consequences. If you have any questions or concerns about anything that is discussed at an ESTA meeting, please bring your concern to ESTA management. An easy to read pamphlet describing the antitrust laws is available from the ESTA staff.*

Karl announced that a PDF is available and can be sent to anyone upon request.

#### **2.2 Reading of the call for patents**

The following statement was read aloud to the assembly by Bill Sapsis:

*ESTA intends not to publish any standard that contains protected intellectual property, unless that information can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent and copyright disclosures to implement its intent. ESTA does not conduct patent or copyright searches and does not warrant that its standards contain no protected intellectual property.*

*In keeping with the open disclosures policy, I ask if anyone present wishes to notify this working group of the existence of a patent, patent application, copyright, or other protected intellectual property that might protect material in a standard being developed by this working group. You need not be the holder of the patent or copyright to notify this working group of its existence.*

Nothing was revealed.

### **3 Attendance and Membership**

#### **3.1 Requirements for membership**

The following statement was read aloud to the assembly by Bill Sapsis:

*Membership is open to all parties who are affected by the work of the group; membership in ESTA is not a requirement, but there is a \$100/person/year participation fee to help fund the costs of running the Technical Standards Program. Voting members are required to attend meetings and vote on letter ballots. Any principal member and alternate that both miss three consecutive meetings or that miss three consecutive letter ballots will have their membership status changed to observer. This action will be taken at the beginning of the first meeting after such inaction and will be recorded in the minutes of that meeting.*

#### **3.2 Introduction of attendees**

Done as part of the introductory remarks.

A green sign-in sheet was circulated.

#### **3.3 Determination of a quorum**

*[There are currently 57 votes possible. A quorum is 19; a supermajority is 29.]*

Bill Sapsis asked for voting members to raise a hand so they can be counted. The number was at least 31, so a supermajority was present

#### **3.4 Processing of new membership and status change requests**

*As of 28 December 2018, the following applications and status change requests have been received:*

Allen Winzler; Clark-Reder Engineering; P; DE (change of voting status)  
Ian Bevan; Walt Disney Parks & Resorts; P; U (change of voting status)  
Peter Batt; Mainstage Theatrical Supply, Inc.; P; DR (new application)  
Andrew Young; Andrew Young; I; U (new application)  
Nick Holmberg; PSAV Presentation Services; O; DR (new application)  
Elmer Veith; Reliable Design Services; P; CP (change of representation)  
Mike Merz; Steven Schaefer Associates, Inc.; A; DE (new application, Alternate to Kyle Kusmer)  
Ross Long (status change from O to A for Rod Haney)

Eddie Kramer moved that we accept the applications. The motion was seconded and carried by unanimous vote. The consensus table below reflects these changes.

#### **3.5 Changes to observer status due to lack of attendance or missed letter ballots**

##### **3.5.1 Attendance**

*The following voters have missed the last two meetings and are in jeopardy of being moved to Observer status if this meeting is also missed:*

William Bradburn; Aerial Arts, Inc. (present online)  
Donald Hoffend, III; Avista Designs (see 3.5.2) (not present)  
Charlie Weiner; Eurotruss (present at this meeting)  
Ted Jones; Grand Stage (present at this meeting)  
Jonathon Duell; JSD Projects LLC (not present)  
William Beautyman; Limelight Productions, Inc. (present online)

Marty Wesstrom; Mountain Productions, Inc.(see 3.5.2) (present)  
 John Snook; Thermotex, Inc. (not present)

Those not present as indicated above have had their voting status changed to that of Observer. The consensus table below reflects these changes.

### 3.5.2 Letter ballots

*The following voters have missed the last three letter ballots and will be moved to Observer status.*

Donald Hoffend, III; Avista Designs  
 Marty Wesstrom; Mountain Productions, Inc. (present, and asked to remain P)  
 Jacob Loretto; Musson Theatrical, Inc. (present, asked to remain P)

Marty and Jacob asked to maintain voting status and said they would be careful about voting regularly in the future. The consensus was that their voting status remain unchanged.

### 3.6 Consensus body

*The full consensus voting body as of 26 January 2019, after all changes occurring at this meeting, is as follows. Check the list carefully.*

Name	Representing	Status	Int Cat
William Bradburn	Aerial Arts, Inc.	P	U
R. Duane Wilson	Amer. Society of Theatre Consultants	P	DE
Max A. Wilson	Applied Electronics	P	MP
Jon Lenard	Applied Electronics	A	MP
Will Todd	Area Four Industries	P	MP
Stewart Stephens	Ashford Management Group	P	DR
Steven Serafin	Chubb Group of Insurance Companies	P	G
Jeremy Hodgson	Cirque Du Soleil, Inc.	P	U
Tom Lapp	Cirque Du Soleil, Inc.	A	U
Alan Winzler	Clark-Reder Engineering	P	DE
Ken Tilson	Columbus McKinnon Corp.	P	MP
Nick Fleming	Columbus McKinnon Corp.	A	MP
Chris Moulton	Contract Services Administration Trust Fund	P	U
Don Earl	Earl Girls, Inc.	P	DR
Steven Ricks	Electronic Theatre Controls, Inc.	P	MP
Michael Lichter	Electronic Theatre Controls, Inc.	A	MP
Joseph Champelli	Entertainment Project Services, LLC	P	DE
Steven Michelman	Entertainment Project Services, LLC	A	DE
Ethan W Gilson	Entertainment Rigging Services, LLC	P	U
Charlie Weiner	Eurotruss	P	MP
John Ringelman	Freeman Companies	P	DR
Chris Schmidt	Freeman Companies	A	DR
Ted Jones	Grand Stage	P	U

<b>Name</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Reid Neslage	H & H Specialties Inc.	P	MP
Pat Grenfell	Hoist Sales & Service	P	DR
Russ Dusek	I Weiss	P	MP
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U
Roger Lattin	I.A.T.S.E. Local 728	P	U
Rod Haney	I.A.T.S.E. Local 891	P	U
Ross Long	I.A.T.S.E. Local 891	A	U
Bruce Darden	InterAmerica Stage, Inc.	P	CP
William Beautyman	Limelight Productions, Inc.	P	DR
Peter Batt	Mainstage Theatrical Supply, Inc	P	DR
William B. Gorlin	M.G. McLaren, P.C.	P	G
Mike Garl	Mike Garl Consulting LLC	P	DE
Rick Montgomery	Motion Laboratories, Inc.	P	MP
Mike Webb	Motion Laboratories, Inc.	A	MP
Marty Weststrom	Mountain Productions Inc.	P	DR
Jacob E. Loretto	Musson Theatrical Inc.	P	DR
Tim Hansen	Oasis Stage Werks	P	DR
Orestes Mihaly	Production Resource Group	P	DR
Shawn Nolan	Production Resource Group	A	DR
Keith Bohn	Production Rigging Resources	P	G
Carlos Ortega	PSAV Presentation Services	P	U
Demian Purdy	PSAV Presentation Services	A	U
Dave Sinkhorn	R&M Materials Handling / Stagemaker	P	MP
Jay Cid	R&M Materials Handling / Stagemaker	A	MP
Jack Gallagher	R&M Materials Handling / Stagemaker	A	MP
Bartholomew J. Mueller	Recreation Engineering Inc.	P	DE
Bennett Brian	Reed Rigging Inc.	P	DR
Elmer Veith	Reliable Design Services	P	CP
Richard J. Nix	Richard J. Nix	I	G
Jesse Adams	Rose Brand	P	DR
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Kyle Kusmer	Steven Schaefer Associates, Inc.	P	DE
Mike Merz	Steven Schaefer Associates, Inc.	A	DE
Joseph Jeremy	Show Distribution Group, Inc.	P	CP
Bill McIntyre	Show Distribution Group, Inc.	A	CP
Dana Bartholomew	Silver State Wire Rope and Rigging	P	DR
Brad Dittmer	Stage Labor of the Ozarks	P	U

Name	Representing	Status	Int Cat
Steve Walker	Steve A. Walker & Associates	P	G
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Harold Ike Shippers	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Stephan Jon Wood	Tait Towers Manufacturing LLC	P	CP
Tony Diemont	Texas Scenic Company	A	DR
Russell Solomon	Texas Scenic Company	P	DR
Jim Niesel	Theatre Projects Consultants, Inc.	P	DE
Jerry Gorrell	Theatre Safety Programs	P	G
Sam Michael	Them, Inc.	P	MP
Jeff Wilkowski	Them, Inc.	A	MP
Daniel H. Louis	Theta Consulting LLC	P	G
Jason Tello	Tyler Truss Systems	P	CP
Tracie Allen	Tyler Truss Systems	A	CP
Robert Haycock	UC Berkeley	I	U
Tracy Nunnally	Vertigo	P	CP
John P. Moore	Vertigo	A	CP
Ian Bevan	Walt Disney Parks & Resorts	P	U
Peter V. Svitavsky	Wenger Corp.	P	CP
Dan Culhane	Wenger Corp.	A	CP
Paul Zagajeski	Wenger Corp.	A	CP
Michael Wells	Xtreme Structures and Fabrication	P	MP
Theresa Kelley	Xtreme Structures and Fabrication	A	MP
Mark Newlin	Xtreme Structures and Fabrication	A	MP
Andrew Young	Andrew Young	I	U
Kalen Larson	ZFX, Inc.	P	CP
<b>Total possible votes:</b>			<b>62</b>
<b>Votes by interest category:</b>	Custom market producer	CP	8
	Designer	DE	7
	Dealer or rental company	DR	15
	General interest	G	7
	Mass market producer	MP	11
	User	U	14
<b>Voting status key:</b> P = Principal voter, A = Alternate voter, I = Individual voter, O = Observer member			

#### 4 Approval of the minutes from the last meeting

[See RIGmin10-2018\_DRAFT.pdf]

Dan Culhane moved to approve the minutes. The motion was second and carried.

## 5 Approval of agenda

*The agenda must be approved, either as drafted or with modifications, by a vote of the working group.*

Dan Culhane moved to approve the agenda. The motion was seconded and carried.

## 6 Old Business

### 6.1 ANSI E1.1 – 2018, wire rope ladders (Revise, reaffirm or withdrawal by 27 September 2023)

It's published!

### 6.2 BSR E1.2 - 20xx, Entertainment Technology - Design, Manufacture and Use of Aluminum Trusses and Towers (Last published in 2012 – Open for revision)

*Task group members:* Keith Bohn (Chair), Jason Tello, Will Todd, Jacob Abbott, Jerry Gorrell, Elmer Veith, and Mike Garl

*From the October minutes:*

*Keith Bohn said that he has reinvigorated the group and might have a document for the January meeting.*

Any news or updates?

Elmer Veith said that he would be in Texas and will meet with Keith Bohn to get some movement on this.

### 6.3 ANSI E1.4-1 - 2016, Entertainment Technology--Manual Counterweight Rigging Systems (Revise, reaffirm, or withdrawal by 11 October 2021)

### 6.4 BSR E1.4-2 - 201x, Entertainment Technology—Statically Suspended Rigging Systems

*Task group members:* Bart Mueller (Chair) Ethan Gilson, Ted Jones, Jesse Adams, and Brad Dittmer.  
[See [BSR\\_E1-4-2\\_DRAFT\\_PR1CmmntResolsR1.pdf](#); [BSRE 1.4-2DRAFT\\_Rig2015-2023r4a.pdf](#)]

A revised set of draft comment resolutions and a revised draft standard have been provided for your review. If they are acceptable, you might decide to move the document back into another public review.

Bart Mueller moved approval of the draft resolutions. The motion was seconded and, after brief discussion, carried with no objection and one abstention.

Bart Mueller moved to send the document to second public review. The motion was seconded. Bill Gorlin said that the terminology for “design load” or “intended design load” are inconsistent. There was further discussion of changes to the language. After further discussion, and the question being called, the motion failed.

Bill Sapsis directed people to offer comments to Bart by February 15.

### 6.5 BSR E1.4-3 - 201x, Entertainment Technology - Manually Operated Hoist Rigging Systems

*Task group members:* Richard Nix and Sam Michael

[See [E1-4-3\\_2ndReviewDRAFTResols\\_r1.pdf](#); [BSR\\_E1-4-3-201x\\_Rig-2015-2022r9.pdf](#)]

*Revised PR2 comment resolutions and a draft document have been provided to the working group for consideration.*

Sam Michael reported. He made a motion to approve the comment resolutions. The motion was seconded, noting that the resolutions asked for guidance from the working group on two comments, 28 and 30, which were discussed. The motion failed, and the resolution document will be sent back to the task group for work on the resolutions.

**6.6 BSR E1.6-1 - 201x, Entertainment Technology--Powered Hoist Systems** (last published in 2012-- currently open for revision)

*Task group members:* Bruce Darden (chair), Chris Kaiser, Dan Culhane, Pete Svitavsky, Stephan Wood, Steve Ricks, Jim Niesel, Sandy Gilzow, Joe Champelli, and Steve Walker.

[See *E1-6-1\_PR2CommentSmmryR1.pdf*; *E1-6-1\_PR2DraftCommentResols\_Rig\_2018-2044.pdf*; *BSR\_E1-6-1\_Rig-2006-2011r7b-(12.18.2018).pdf*]

The document was in public review until 23 October 2018. Comments with objections were received. Draft comment resolutions and a revised draft standard have been provided.

Are the proposed comment resolutions acceptable to the working group? If so, the working group might choose to initiate a letter ballot accepting the current draft standard as an ANS.

Bruce Darden moved to accept the draft resolutions, considering them as non-substantive revisions to the draft. The motion was seconded and carried, without discussion or objection.

Bruce Darden moved to accept the revised draft as an ANS. The motion was seconded, and will be answered by letter ballot.

**6.7 BSR E1.6-2 - 20xx, Entertainment Technology--Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry** (last published in 2018 – Open for revision)

*Task group members:* Ken Tilson, John Ringleman, Ben Brian, Marty Westrom, Rick Montgomery, Chris Schmidt, Mike Weston, Sandy Gilzow, and Elmer Veith (Chair)

*From the October minutes:*

*Elmer Veith reported that the task group met today. Not great attendance at today's meeting, and they will need a few more task group meetings before they have a document for the working group.*

*Any news, action, or updates to report?*

Elmer reported progress, and expects to have a document ready by July

**6.8 BSR E1.6-3 - 201x, Selection and Use of Serially Manufactured Chain Hoists in the Entertainment Industry** (Last published 2012 – Open for revision)

*Task group members:* John Ringleman, Ben Brian, Pat Grenfell, Nick Fleming, Charlie Weiner, Rod Haney, Mike Weston, Greg Williams and Elmer Veith (Chair)

[See *Summry\_RWG\_Ltr\_Ballot for BSR\_E1-6-3\_SndToPR*; *BSR\_E1-6-3\_201x\_2008-2019r6a.pdf*; *BSR\_E1-6-3\_201x\_2008-2019r6a ESTA Format.pdf* one in the current two-column format, the other in ESTA's preferred format according to the style guide]

*The document was sent to a letter ballot initiating approval for a first public review. There were objections and comments received, all of which pertained to questions about document formatting, and none of which pertained to the document's normative requirements. The motion carried, so the question will be forwarded to the Technical Standards Council for approval. Both formats have been provided; the working group will decide which format to use.*

Elmer Veith recommended that the two-column format be used, and made a motion to submit this format. The motion was seconded and carried.

**6.9 BSR E1.6-4 - 201x, Control of Electric Chain Hoists in the Entertainment Industry** (Last published in 2013 – Open for revision)

*Task group members:* Rick Montgomery, John Ringleman, Elmer Veith, Jim Hodgson, Steve Wood, Mike Webb, Joe Jeremy (chair).

*From the October minutes:*



*Joseph Jeremy said that they are holding on further work until further progress is made to either point to or include BSR E1.64, being worked on in the SMWG.*

*Any news, action or updates to report?*

Joseph Jeremy reported that there is no news. The E1.64 task group will meet tomorrow. Progress is being made.

**6.10 ANSI E1.8 – 2018, Entertainment Technology—Loudspeaker Enclosures Intended for Overhead Suspension—Classification, Manufacture and Structural Testing** (Revise, reaffirm or withdrawal by 29 November 2023)

It's published!

**6.11 ANSI E1.15 - 2006 (R2016), Entertainment Technology--Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom & Base Assemblies** (revision, reaffirmation, or withdrawal by 23 September 2021)

**6.12 BSR E1.21 - 20xx, Entertainment Technology — Temporary Structures Used for Technical Production of Outdoor Entertainment Events** (originally published 19 December 2013 – open for revision)  
*Task group members:* Richard Nix (Chair), Kyle Kusmer, Bill Gorlin, Dan Louis, Steve Serafin, Elmer Veith, Sandy Gilzow, and Rod Haney  
*[See E1-21\_20xx 2018\_Rig2010-2025r8.pdf]*

*A revised draft has been offered to the Working Group for consideration.*

Bill Gorlin offered comments, and Karl Ruling made an r8a version incorporating those changes. Bill Gorlin moved to send the revised draft to public review. The motion was seconded and carried without further discussion, and with no objection. A BSR 8/108 will be filed with ANSI, and the document will be sent to public review.

**6.13 ANSI E1.22 - 2016, Entertainment Technology - Fire Safety Curtain Systems** (Revise, reaffirm, or withdrawal by 11 October 2021)

**6.14 ANSI E1.39 - 2015, Entertainment Technology –Selection and Use of Personal Fall Arrest Systems on Portable Structures Used in the Entertainment Industry** (Revision, reaffirmation, or withdrawal by 28 January 2020)

Bill Sapsis said that he intended to have this document opened for revision at the next meeting.

**6.15 ANSI E1.43 - 2016, Live performer flying effect standard** (Revise, reaffirm, or withdrawal by 12 February 2021)

**6.16 ANSI E1.44 – 2014, Common Show File Exchange Format for Entertainment Industry Automation Control Systems -- Stage Machinery** (revision, reaffirmation, or withdrawal by 6 February 2019)

*From the October meeting minutes:*

*Joseph Jeremy moved that this be moved to the Stage Machinery Working Group. The motion was seconded, and carried by unanimous consent. This document will no longer be included on the RWG agenda*

Karl Ruling reported that the project had been accepted by the Stage Machinery Working Group.

**6.17 Rigging Glossary**

*Any news or action at this time?*

## **6.18 BSR E1.47 – 20xx, Recommended Guidelines for Entertainment Rigging System Inspections**

(Originally published on 28 April 2017 – open for revision)

*Task group members:* Bart Mueller, Chris Kaiser (chair), Tracy Nunally, Ted Jones, Duane Wilson, Pete Svitavsky, Eric Rouse, Ian Bevan, Russell Solomon

[See BSR\_E1-47\_Rig-2014-2003r5\_11January2019\_clear.pdf]

*The Task Group has revised the current E1.47 Recommended Guidelines for Entertainment Rigging Inspections and is providing a draft document for your review. Following discussion of the draft document during the meeting, the Task Group will seek guidance of the Working Group for the next step of the document towards a first public review.*

Tim Hansen moved that it be offered for public review. The motion was seconded. There was discussion. The motion carried with a show of hands. A BSR 8/108 will be filed with ANSI, and the document will be sent to public review.

*[TSM Note: This motion also requires approval from the TSC. The question was preloaded to them, and the corresponding motion was carried during their meeting held on 27 January].*

## **6.19 ANSI E1.50-1 – 2017, Requirements for the Structural Support of Temporary LED, Video & Display Systems** (Revision, reaffirmation, or withdrawal by 14 August 2022)

## **6.20 ANSI E1.56 - 2018, Rigging Support Points Design, Fabrication, Installation, and Testing** (Revision, reaffirmation or withdrawal by 06 November 2023)

It's published!

## **6.21 BSR E1.59 – 20xx, Automation Vector Transmission Protocol**

*Task group members:* [RWG] Jem Hodgson, Joe Jeremy, Jim Love, Bill McIntyre, and Michael Lichter.

[CPWG] Julian Hoare, Roger Lattin, Scott Blair, Dan Murfin, Kevin Loewen, and Rich Dionne

*Any news, actions, or updates to report?*

Karl Ruling reported that the CPWG approved a motion to send it to public review. A BSR 8/108 will be filed with ANSI, and the document will be sent to public review.

*[TSM Note: This motion also requires approval from the TSC. The question was preloaded to them, and the corresponding motion was carried during their meeting held on 27 January].*

## **7 New business**

### **7.1 Possible new project: manually-operated chain hoists**

[See TSP\_ProjectRequest - Manual Chain Hoists - Signed.pdf]

The project request has been pre-loaded into the TSC agenda for consideration. Agreement to undertake the project also requires a Supermajority vote of the working group consensus body.

The project was discussed.

Tim Hansen moved that the project be accepted. Seconded. The motion carried with the required supermajority. A PINS will be filed with ANSI.

*[TSM Note: The corresponding motion was carried by the TSC during their meeting held on 27 January].*

## **8 Other business and announcements**

### **8.1 Above & Beyond Awards**

Information on the Above & Beyond Awards may be found at [http://tsp.esta.org/tsp/news/award\\_recipients.html](http://tsp.esta.org/tsp/news/award_recipients.html). The nomination site is open year round, and the award is designed for members to highlight the work of their peers.

An Above & Beyond award was presented to Elmer Veith, by Jacob Abbot, who nominated Elmer for his continued participation and proactiveness with many standards.

### **9 Schedule for future meetings**

The full and current meeting schedule may be found at <http://www.esta.org/ESTA/meetings.php>.

Chris Kaiser suggested that the meetings be held earlier in the day when they are in the Pacific Time Zone.

#### **9.1 Spring 2019 meetings (USITT)**

The Spring 2019 ESTA meetings will be held in conjunction with the USITT annual conference and stage expo, in Louisville, KY. The Rigging Working Group is scheduled to meet from 19:00 - 22:00 on Thursday, 21 March 2019, at the Hyatt Regency Louisville.

#### **9.2 Summer 2019 meetings**

The July 2019 ESTA meetings will be held back in Westlake, TX, at the D/FW Marriott Solana, from 18 July through 22 July 2019. The complete schedule is still to be confirmed.

### **10 Adjournment**

All agenda business being complete, and there being no further business brought forth, Bill Sapsis adjourned the meeting at 21:46

Rigging Working Group members as of 25 January 2019

<b>Name</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Jacob Abbott	PSAV Presentation Services	O	U
Jesse Adams	Rose Brand	P	DR
Tracie Allen	Tyler Truss Systems	A	CP
Matthew Antonucci	Contract Services Administration Trust Fund	O	U
Brent Armstrong	Alpine Rigging & Structural Design	O	CP
William Ian Auld	Auld Entertainment	O	U
Robert Barbagallo	Solotech Inc.	O	DR
Dana Bartholomew	Silver State Wire Rope and Rigging	P	DR
Peter W. Batt	Mainstage Theatrical Supply, Inc	P	DR
William Beautyman	Limelight Productions, Inc.	P	DR
Ian Bevan	Walt Disney Parks & Resorts	P	U
Roy Bickel	Roy Bickel	O	G
Tyler Bland	Walt Disney Parks & Resorts	O	U
Keith Bohn	Production Rigging Resources	P	G
David Bond	Kinesys	O	MP
William Bradburn	Aerial Arts, Inc.	P	U
Louis Bradfield	Louis Bradfield	O	U
Bennett Brian	Reed Rigging Inc.	P	DR
David M. Campbell	Geiger Engineers	O	G
Joseph Champelli	Entertainment Project Services, LLC	P	DE
Jay Cid	R&M Materials Handling / Stagemaker	A	MP
Daniel J. Clark	Clark-Reder Engineering, Inc.	O	G
Benjamin Cohen	Chicago Flyhouse Inc.	O	CP
David Collette	PSAV Presentation Services	O	U
Dan Culhane	Wenger Corp.	A	CP
Bruce Darden	InterAmerica Stage, Inc.	P	CP

Rigging Working Group members as of 25 January 2019

<b>Name</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
David Darland	PSAV Presentation Services	O	U
Robert Dean	ZFX, Inc.	O	CP
Jonathan Deull	JSD Projects LLC	O	U
Tony Diemont	Texas Scenic Company	A	DR
Jim Digby	Event Safety Alliance	O	U
Brad Dittmer	Stage Labor of the Ozarks	P	U
Russ Dusek	I Weiss	P	MP
Don Earl	Earl Girls, Inc.	P	DR
Nick Fleming	Columbus McKinnon Corp.	A	MP
Tim Franklin	Theta Consulting LLC	O	G
Jack Gallagher	R&M Materials Handling / Stagemaker	A	MP
Mike Garl	Mike Garl Consulting LLC	P	DE
James M. Garner	Walt Disney Studios	O	G
Ethan W Gilson	Entertainment Rigging Services, LLC	P	U
Sanford P. Gilzow	Shur-Rig LLC	O	G
William B. Gorlin	M.G. McLaren, P.C.	P	G
Jerry Gorrell	Theatre Safety Programs	P	G
Michael P. Gosenski	Rigging Systems LLC	O	U
Erin Grabe	ESTA	exf	G
Pat Grenfell	Hoist Sales & Service	P	DR
Rod Haney	I.A.T.S.E. Local 891	P	U
Tim Hansen	Oasis Stage Werks	P	DR
Pete Happe	Pete Happe	O	G
Sean Harding	Port Lighting Systems	O	G
Robert Haycock	UC Berkeley	I	U
Chris Higgs	Total Solutions Group	O	G

Rigging Working Group members as of 25 January 2019

<b>Name</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Jeremy Hodgson	Cirque Du Soleil, Inc.	P	U
Nick Holmberg	PSAV	O	DR
Donald Hoffend_III	Avista Designs, LLC	O	G
Joseph Jeremy	Show Distribution Group, Inc.	P	CP
Ted Jones	Grand Stage	P	U
Kent H. Jorgensen	IATSE Local 80	O	G
Gary Justesen	Oasis Stage Werks	O	DR
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Theresa Kelley	Xtreme Structures and Fabrication	A	MP
Jerald Kraft	JTH Lighting Alliance	O	CP
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U
Kyle Kusmer	Steven Schaefer Associates, Inc	P	DE
Tom Lapp	Cirque Du Soleil, Inc.	A	U
Kalen Larson	ZFX, Inc.	P	CP
Roger Lattin	I.A.T.S.E. Local 728	P	U
Jon Lenard	Applied Electronics	A	MP
Phillip Lewis	Tait Towers Manufacturing LLC	O	MP
Michael Lichter	Electronic Theatre Controls, Inc.	A	MP
Ross Long	I.A.T.S.E. Local 891	A	U
Jacob E. Loretto	Musson Theatrical Inc.	P	DR
Daniel H. Louis	Theta Consulting LLC	P	G
Wendy Manson	Cirque Du Soleil, Inc.	O	U
Joseph McGeough	Foy Inventerprises, Inc.	O	CP
Bill McIntyre	Show Distribution Group, Inc.	A	CP
Mike Merz	Steven Schaefer Associates, Inc	A	DE
Sam Michael	Thern, Inc.	P	MP

Rigging Working Group members as of 25 January 2019

<b>Name</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Steven Michelman	Entertainment Project Services, LLC	A	DE
Orestes Mihaly	Production Resource Group	P	DR
Rick Montgomery	Motion Laboratories, Inc.	P	MP
John P. Moore	Vertigo	A	CP
Chris Moulton	Contract Services Administration Trust Fund	P	U
Bartholomew J. Mueller	Recreation Engineering Inc.	P	DE
John Neal	Rhino Staging	O	G
Reid Neslage	H & H Specialties Inc.	P	MP
Mark Newlin	Xtreme Structures and Fabrication	A	MP
Jim Niesel	Theatre Projects Consultants, Inc.	P	DE
Richard J. Nix	Richard J. Nix	I	G
Shawn Nolan	Production Resource Group	A	DR
Tracy Nunnally	Vertigo	P	CP
Carlos Ortega	PSAV Presentation Services	P	U
Gregory Orth	WNP Services, Inc.	O	DR
Miriam Paschetto	Geiger Engineers	O	G
Kurt Pragman	Pragman Associates, LLC	O	G
Demian Purdy	PSAV Presentation Services	A	U
Steven Ricks	Electronic Theatre Controls, Inc.	P	MP
Mark Riddlesperger	LA ProPoint, Inc.	O	CP
John Ringelman	Freeman Companies	P	DR
Eric Rouse	Chicago Flyhouse	O	CP
Karl G. Ruling	ESTA	exf	G
Tim Salamon	PSAV Presentation Services	O	DR
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services, Inc.	O	DE

Rigging Working Group members as of 25 January 2019

<b>Name</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Chris Schmidt	Freeman Companies	A	DR
Ford Sellers	Chauvet Lighting	O	MP
Steven Serafin	Chubb Group of Insurance Companies	P	G
Steven C. Shaw	Levitating Productions, Inc.	O	MP
Harold Ike Shippers	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Dave Sinkhorn	R&M Materials Handling / Stagemaker	P	MP
Monica Skjonberg	Skjonberg Controls, Inc.	O	CP
Knut Skjonberg	Skjonberg Controls, Inc.	O	CP
John C. Snook	Thermotex Industries Inc.	O	CP
Russell Solomon	Texas Scenic Company	P	DR
Todd Spencer	PSAV Presentation Services	O	U
Stewart Stephens	Ashford Management Group	P	DR
Peter V. Svitavsky	Wenger Corp.	P	CP
Ross Taylor	Taylor & Taylor Associates	O	G
Jason Tello	Tyler Truss Systems	P	CP
Ken Tilson	Columbus McKinnon Corp.	P	MP
Will Todd	Area Four Industries	P	MP
James Tomlinson	Team Tomlinson	O	G
Stephen Vanciel	IATSE Local 631	O	U
Elmer Veith	Reliable Design Services	P	CP
Steve Walker	Steve A. Walker & Associates	P	G
Patrick Wallace	PSAV Presentation Services	O	U
Mike Webb	Motion Laboratories, Inc.	A	MP
Charlie Weiner	Eurotruss	P	MP
Michael Wells	Xtreme Structures and Fabrication	P	MP
Drew Wending	PSAV Presentation Services	O	DR



Rigging Working Group members as of 25 January 2019

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<b>Name</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Marty Wesstrom	Mountain Productions Inc.	P	DR
Mike Weston	PSAV Presentation Services	O	DR
Jeff Wilkowski	Thern, Inc.	A	MP
Greg Williams	PSAV Presentation Services	O	G
R. Duane Wilson	Amer. Society of Theatre Consultants	P	DE
Max A. Wilson	Applied Electronics	P	MP
Allen Winzler	Clark-Reder Engineering, Inc.	P	DE
Stephan Jon Wood	Tait Towers Manufacturing LLC	P	CP
Jeong Sik Yoo	Ghost LX	O	DE
Andrew Young	Andrew Young	I	U
Paul Zagajeski	Wenger Corp.	A	CP